

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-16 and 18-20 are pending in the application, with 1, 8, 15, and 20 being the independent claims. Claim 17 is sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1-6, 8-13, 15, 16, and 18-20 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowable Subject Matter

Applicant thanks the Examiner for promptly identifying the allowable matter contained in claims 2, 4-7, 9, 11-14, and 16, as indicated in paragraphs 4 and 5 of the Office Action.

Amendments to the Specification

Applicant has amended the specification to correct minor typographical and grammatical errors, as indicated above. These changes introduce no new matter, and their entry is respectfully requested.

Rejections under 35 U.S.C. § 112

In paragraph 1 of the Office Action, the Examiner rejected claims 3-7, 11, and 18-20 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses this rejection.

The Examiner rejected claim 3 stating "it is not clear how an address can be coded into an instruction since an address and an instruction represent different information." The Examiner also rejected claims 18 and 19 for the same reason.

As described in the present application, in an embodiment, the present invention operates by:

"transforming data into an instruction for execution by the central processing unit. The transformation is triggered by first receiving a misaligned instruction address, generating a hardware exception and then, in response to the exception, executing an exception handling routine that transforms the data into an instruction for the central processing unit."

(See paragraph [0007] of the present application.) As also described in the present application, in an embodiment, "the invention uses a misaligned instruction address as the data to be transformed." (See paragraph [0023]). In this embodiment of the present invention, the misaligned instruction address, or a portion thereof, is data used by the exception handling routine to generate an instruction.

Applicant has amended claims 1 and 3, as well as 15, 18, and 19, to more clearly define this feature of the present invention.

The Examiner rejected claims 4 and 11 stating that "the exception flag" lacks proper antecedent basis. Applicant has amended claims 4 and 11 to recite "an exception flag."

The Examiner rejected claim 20 stating "it is not clear how to cause an address to generate an exception." Applicant has amended claim 20 to recite "execute an exception in response to said misaligned instruction address."

No specific reasons are stated in the Office action for the rejection of claims 5-7. However, in light of the amendments to the claims and the argument herein, Applicant believes any reasons the Examiner had for rejecting these claims have been traversed.

Reconsideration and withdrawal of this rejection of claims 3-7, 11, and 18-20 are respectfully requested.

Rejections under 35 U.S.C. § 102

In paragraph 3 of the Office Action, the Examiner rejected claims 1, 3, 8, 10, 15 and 17-20 under 35 U.S.C. § 102 as being anticipated by U.S. Patent Application Publication No. 2002/0144041 (herein after Revilla). Claim 17 is sought to be cancelled without prejudice to or disclaimer of the subject matter therein; thus, the rejection of this claim is moot. Applicant respectfully traverses this rejection with respect to the other claims.

The Examiner rejected independent claims 1, 8, and 15, in part, stating the "generating at least one instruction" (See, e.g., claim 1) feature of the present invention is

anticipated by executing instructions "inside the exception handling routine of Jones et al." [The cite to Jones et. al is believed to be to Revilla.] As described throughout the present application, the present invention does more than execute pre-existing processor instructions contained in an exception handling routine. The present invention operates by "transforming data into at least one instruction" that can be executed by a processor. This claimed feature of the present invention, recited in amended independent claims 1, 8, and 15, is neither disclosed or suggested by Revilla. Thus, for at least this reason, independent claims 1, 8, and 15 are not anticipated by Revilla. Revilla appears to describe one way to detect when a misaligned instruction exception will occur, before the instruction is executed, rather than, for example, how to use an exception handling routine, executed in response to a misaligned instruction, to facilitate transforming data (e.g., decompressing instructions stored in a memory in a compressed format) into at least one instruction for execution by a processor.

The Examiner rejected independent claim 20 for reasons similar to independent claims 1, 8, and 15. As noted above, Revilla does not disclose or suggest at least the "transforming data" feature of the present invention recited in claim 20.

Claims 3, 10, 18, and 19 depend from one of independent claims 1, 8, and 15, and are patentable over Revilla for at least the reasons noted above.

Reconsideration and withdrawal of this rejection of claims 1, 3, 8, 10, 15 and 18-20 are respectfully requested.

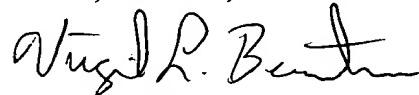
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Virgil L. Beaston
Attorney for Applicant
Registration No. 47,415

Date: 9/3/04

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600
293920